FLEXIBLE AND AREA EFFICIENT COLUMN REDUNDANCY
FOR NON-VOLATILE MEMORIES

ABSTRACT OF THE DISCLOSURE

The present invention presents a non-volatile memory wherein bad columns in the array of memory cells can be removed. According to another aspect of the present invention, substitute redundant columns can replace the removed columns. Both of these processes are performed on the memory in a manner that is externally transparent and, consequently, need not be managed externally by the host or controller to which the memory is attached. An inventory of the bad columns can be maintained on the memory. At power up, the list of bad columns is used to fuse out the bad columns. The memory may also contain a number of redundant columns that can be used to replace the bad columns.